

LAND APPLICATION OF BIOSOLIDS  
ELSIE M FARMER

KW37 (FIELDS 1 – 3)  
KING WILLIAM COUNTY, VIRGINIA  
MAY 2013



*Piedmont Regional Office*  
JUN 03 2013  
**RECEIVED**

May 14, 2013

Mr. Seth Mullins  
Dept. of Environmental Quality  
Piedmont Regional Office  
4949-A Cox Road  
Glen Allen, VA 23060

Dear Mr. Mullins:

Transmitted herein for your consideration is land application site for Elsie M. Farmer (designated as KW 37, (fields 1-3) located in King William County, Virginia. This submission contains strictly site specific information. Please refer to the operations and maintenance manual submitted under separate cover for all non-site specific information.

Do not hesitate to contact me at (804) 443-2170 should you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink that reads "D. Steve McMahon". The signature is fluid and cursive, with the first name "D." and last name "McMahon" clearly legible.

D. Steve McMahon  
Sr. Technical Services Director

/cmw



## FIELD SUMMARY SHEET

**Elsie Farmer**

**KW37**

<b>SYNAGRO FIELD #</b>	<b>GROSS ACRES</b>	<b>NET ACRES</b>	<b>FSA TRACT #</b>	<b>FSA FIELD #</b>	<b>TOPO QUAD</b>	<b>OWNER</b>
37-01	71.0	64.9	None	None	Hanover	Elsie M Farmer
37-02	38.1	36.9	None	None	Hanover	Elsie M Farmer
37-03	10.6	10.5	None	None	Hanover	Elsie M Farmer
<b>TOTALS:</b>	<b>119.7</b>	<b>112.3</b>				



VIRGINIA REQUEST AND CONSENT FOR BIOSOLIDS

FARM OPERATOR: Elsie M. Farmer PHONE: (804) 317-8239  
ADDRESS: 90 Phillip M. Farmer Jr 9215 Derwent Dr Mechanicsville, VA 23116  
FARM LOCATION: 1/2 mile east of Calvo on the southside of RT 30 in King William Co

FSA TRACT #: \_\_\_\_\_  
TOTAL ACRES: 63 COUNTY: King William  
CROPS: Thinned Loblolly Pine

1. I agree to be responsible for adhering to the following conditions, where applicable:
  - a. The soil pH will be adjusted  $\geq 6.0$  when biosolids are applied. (This may be accomplished through the application of lime-treated biosolids).
  - b. Do not graze animals on the land for 30 days after the application of biosolids. In addition, animals intended for dairy production should not be allowed to graze on the land or be fed chopped foliage for 60 days after the application of biosolids. Meat-producing livestock should not be fed chopped foliage for 30 days after the application of biosolids.
  - c. Food crops for direct human consumption with harvested parts below the surface of the land shall not be harvested for 14 months after the application of biosolids.
  - d. Food crops for direct human consumption with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface  $\geq 4$  months prior to incorporation into the soil or 38 months when the biosolids remain on the land surface  $< 4$  months prior to incorporation.
  - e. Food crops, feed crops and fiber crops shall not be harvested for 30 days after application of biosolids.
  - f. Public access to land with a low potential for public exposure (land the public uses infrequently including but not limited to agricultural land and forests) shall be restricted for 30 days after application of biosolids. Public access to land with a high potential for public exposure (land the public uses frequently including but not limited to a public contact site such as parks, playgrounds and golf courses) shall be restricted for 1 year. No biosolids-amended soil shall be excavated or removed from the site for 30 days following the biosolids application unless adequate provisions are made to prevent public exposure to soils, dusts or aerosols.
  - g. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.
  - h. Supplemental commercial fertilizer or manure applications should be coordinated with the biosolids applications such that the total crop needs for nutrients are not exceeded as identified on the nutrient balance sheet or the nutrient management plan approved by the Virginia Department of Conservation and Recreation to be supplied to the farm operator by Synagro at the time of application of biosolids to a specific permitted site.
  - i. Tobacco, because it has been shown to accumulate cadmium, should not be grown for three years following the application of biosolids-borne cadmium equal to or exceeding 0.45 lbs/acre.
2. I understand that this transaction is not contemplated by the parties to be a sale of goods, and that Synagro is willing to provide to me without charge the service of land applying biosolids which have been approved by the appropriate regulatory agencies for land application.
3. I understand that successful crop production depends on many variables, such as weather, soil conditions and specific farming practices and that while Synagro has experience with land application of biosolids, the responsibility for properly accommodating agricultural practices to biosolids utilization are solely mine. I have also read and understand the "Important Information About Using Biosolids as a Fertilizer" which is on the reverse side and incorporated by reference in this Request and Consent.

X ELSIE M. FARMER  
By Phillip M. Farmer / POA  
OPERATOR'S SIGNATURE

1-18-11  
DATE

Synagro \* 10647 Tidewater Trail \* Champlain, VA 22438 \* 804.443.2170



**VIRGINIA LANDOWNER CONSENT FOR BIOSOLIDS APPLICATION**

OWNER NAME: Elsie M. Farmer PHONE: (804) 317-8239  
ADDRESS: 90 Phillip Farmer Jr 9215 Derwent Dr Mechanicsville, VA 23116  
OPERATOR NAME: \_\_\_\_\_ TOTAL ACRES: 63  
FSA TRACT #: \_\_\_\_\_ COUNTY: King William

The undersigned hereby agrees to the application of biosolids by Synagro at application rates in accordance with applicable laws and regulations.

This biosolids application agreement is made on \_\_\_\_\_ between Elsie M. Farmer (Landowner) and Synagro (owner of the permit).

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as Farmer Tract (Landowner's land). Synagro agrees to apply and Landowner agrees to comply with certain permit requirements following application of biosolids on Landowner's land in amounts and in a manner authorized by permit number \_\_\_\_\_ which is held by Synagro.

Landowner acknowledges that the appropriate application of biosolids will be beneficial in providing fertilizer and soil conditioning to the property. Moreover, Landowner acknowledges having been expressly advised that, in order to protect public health:

1. I understand that Synagro will coordinate biosolids deliveries with my farm operator hereinafter (leasee) unless otherwise advised by me.
2. I agree to allow Synagro and federal, state and local regulatory staff access to my land for the purposes of permitting the site, inspecting the site, applying biosolids, obtaining samples from the site and testing. I reserve the right to ask the above parties for proper identification at any time.
3. I understand that the following conditions apply to my land following biosolids applications and that my leasee has signed an agreement form with Synagro stating that my leasee will be responsible for following these conditions where applicable:
  - a. Do not graze animals on the land for 30 days after the application of biosolids. In addition, animals intended for dairy production shall not be allowed to graze on the land for 60 days after the application of biosolids.
  - b. Food crops (crops consumed by humans including but not limited to fruits, vegetables and tobacco) with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface  $\geq 4$  months prior to incorporation into the soil, or 38 months when the biosolids remain on the land surface  $< 4$  months prior to incorporation. Food crops, feed crops and fiber crops shall not be harvested for 30 days after application of biosolids.
  - c. Public access to land with a low potential for public exposure (land the public uses infrequently including but not limited to agricultural land and forests) shall be restricted for 30 days. Public access to land with a high potential for public exposure (land the public uses frequently including but not limited to a public contact site such as parks, playgrounds and golf courses) shall be restricted for 1 year.
  - d. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.
4. Supplemental commercial fertilizer or manure applications should be coordinated with the biosolids applications such that the total crop needs for nutrients are not exceeded as identified on the nutrient balance sheet or the nutrient management plan approved by the Virginia Department of Conservation and Recreation to be supplied to the Landowner by Synagro at the time of application of biosolids to a specific permitted site.
5. Tobacco, because it has been shown to accumulate cadmium, should not be grown on Landowner's land for 3 years following the application of biosolids-borne cadmium equal to or exceeding 0.45 lbs/ac (0.5 kg/ha).
6. I have also read the "Information About Biosolids" which is on the reverse side and incorporated by reference in this Consent.
7. The term of this Consent shall continue until written notification is given by either party to terminate this agreement. Furthermore, due to the significant costs incurred by Synagro to permit the land application site, I agree not to change to another biosolids provider for a period of three years from the date of permit issuance.
8. I certify that I am holder of legal title to the above described property or am authorized by the holder to give consent for the land application of biosolids and that there are no restrictions to the granting of consent under this form.

X ELSIE M. FARMER  
By Phillip M. Farmer / POA  
OWNER SIGNATURE (If signing as a representative, include title)

1-18-11  
DATE

## Tax ID Landowner Identification Sheet

<b>Landowner</b>	<b>Field #</b>	<b>Tax ID</b>
Estate of Elsie M Farmer c/o Phil Farmer	37 – 01	10 – 41

<b>Field #</b>	<b>Latitude (north)</b>	<b>Longitude (west)</b>
37 – 01	37 <sup>0</sup> 48' 22.29	77 <sup>0</sup> 17' 39.32"



**TAX MAP**



### Tax ID Landowner Identification Sheet

<b>Landowner</b>	<b>Field #</b>	<b>Tax ID</b>
Estate of Elsie M Farmer c/o Phil Farmer	37 – 01	10 – 41
Estate of Elsie M Farmer c/o Phil Farmer	37 – 02	10 – 41
Estate of Elsie M Farmer c/o Phil Farmer	37 – 03	10 – 41

<b>Field #</b>	<b>Latitude (north)</b>	<b>Longitude (west)</b>
37 – 01	37 <sup>0</sup> 48' 22.29"	77 <sup>0</sup> 17' 39.32"
37 – 02	37 <sup>0</sup> 48' 41.43"	77 <sup>0</sup> 17' 44.88"
37 – 03	37 <sup>0</sup> 48' 28.54"	77 <sup>0</sup> 17' 47.36"



# MAP LEGEND



House/Dwelling with a well



Rock Outcrop



Well



Lake/Pond



Slope which exceeds 15%



Intermittent Stream



Stream/River



Agricultural/Drainage Ditch



Field boundary



Property Line

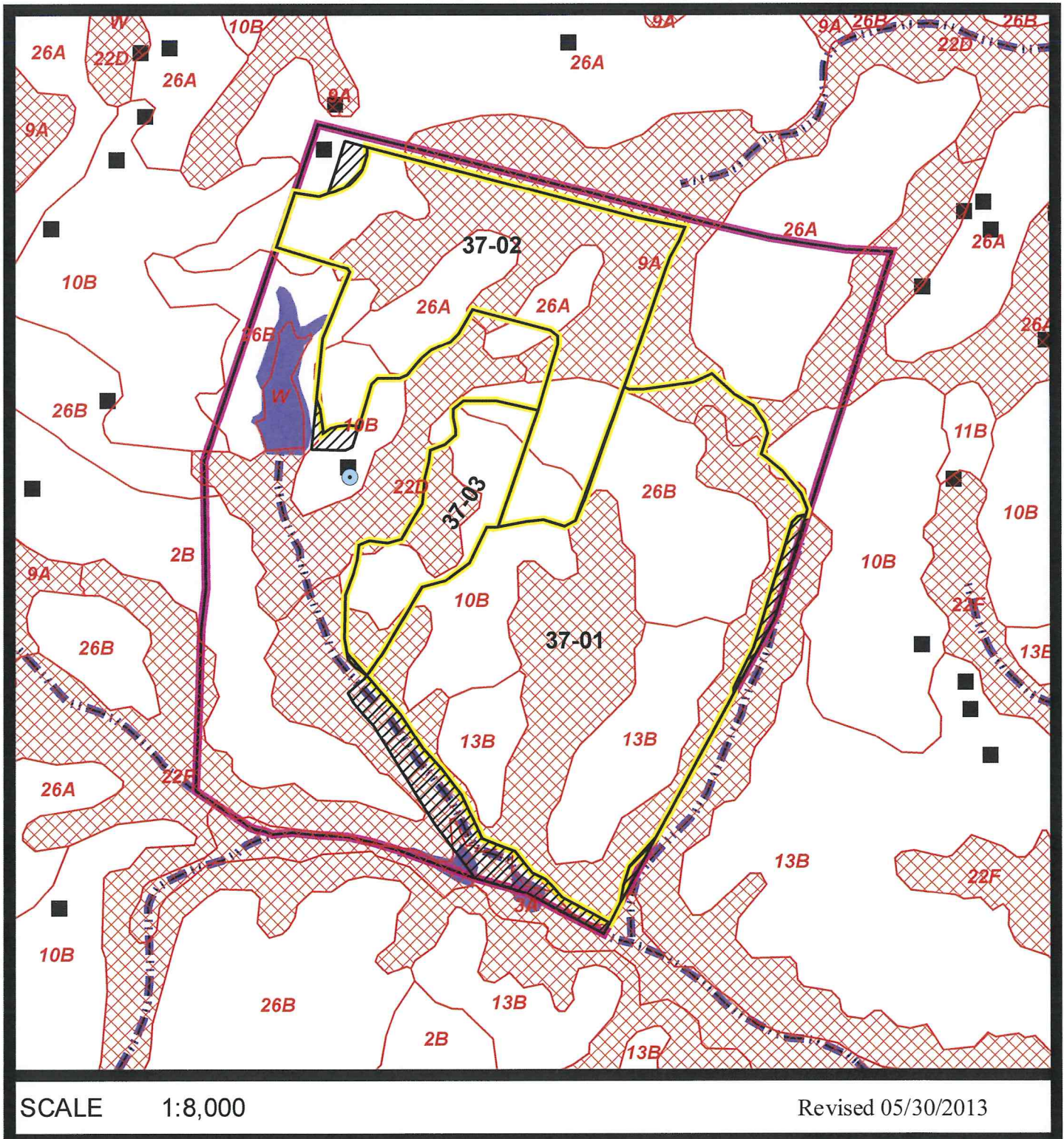
## Environmentally Sensitive Areas

Field	Reason for Sensitive Area
37-01	High Leaching Potential (Map Unit 22F – 43%)
37-02	High Water Table (Map Unit 9A – 45%)
37-03	High Leaching Potential (Map Units 22D, 22F – 38%)


### King William County Soils that are Environmentally Sensitive

Soil Map Unit	Series Name	Time of year		Environmental
		High Water	Flooded	
3A	Bibb/Kinston	Nov – June	Nov – June	Drainage
4A	Bohicket	Nov – June	Nov – June	
5A	Bojac	Jan – Dec		Leaching
6A, 6B	Bojac			Leaching
7A	Catpoint			Leaching
8A	Conetoe			Leaching
9A	Daleville	Nov – May		
14A	Kenansville			Leaching
15A	Lanexa	Jan – Dec	Jan – Dec	Drainage
16A	Mattan	Jan – Dec	Jan – Dec	Drainage
18A	Myatt	Nov – April		
20A	Osier	Nov – March		Drainage
22D, 22F	Remlik/Nevarc			Leaching
23A	Riverview		Dec – March	
24A	Roanoke	Nov – May		
29B, 29D, 29F	Tarboro			Leaching
30A	Tomotley	Nov – April		
32A	Wehadkee	Nov – May	Nov – May	



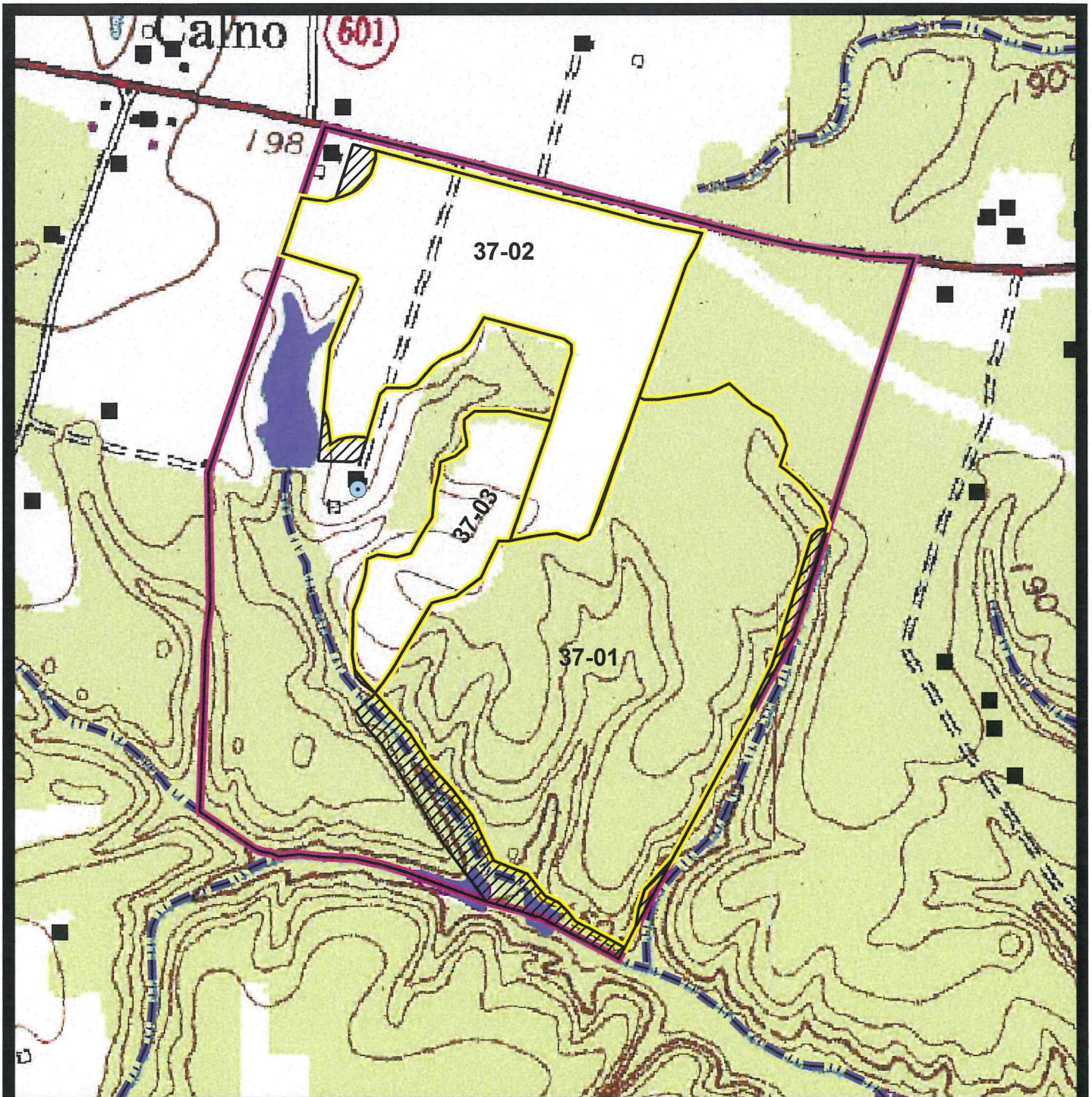


## SOIL MAP

 Environmentally Sensitive Areas







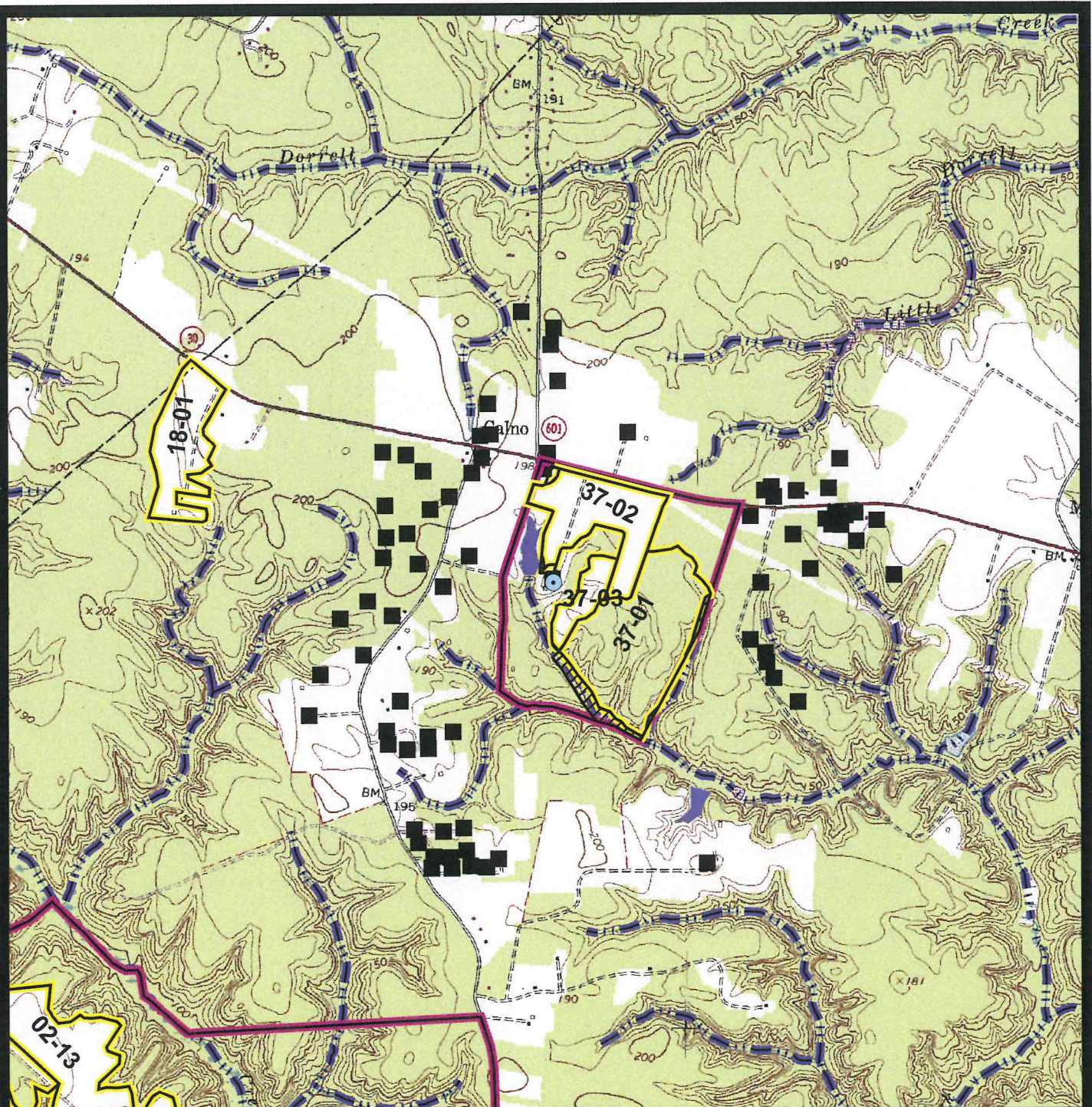
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Revised 05/30/2013

TOPO MAP

□  
N  
□





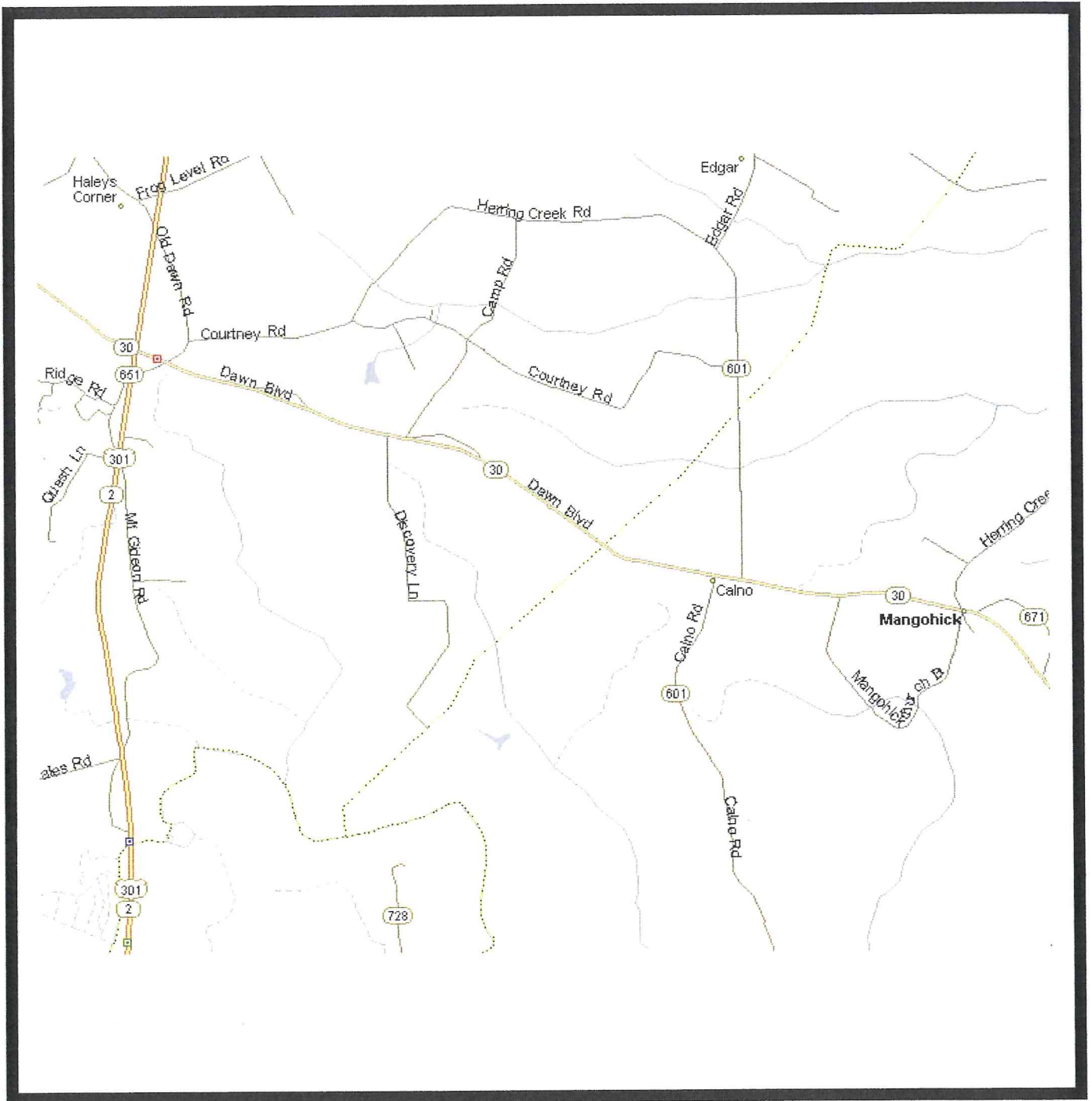
SCALE 1:24,000

Revised 05/30/2013

TOPO MAP

□  
N  
□





LOCATION MAP

